



June 14, 2011

Mr. Anthony Saracino
Chair, California Water Commission
Department of Water Resources
P. O. Box 942836
Sacramento, CA 94236

SENT VIA EMAIL TO cwc@water.ca.gov

RE: The June 7, 2011 Draft Agricultural Water Measurement Regulation Fails to Comply with SB 7x 7 and Must be Revised

Dear Mr. Saracino and Members of the Commission:

On behalf of the Natural Resources Defense Council, Pacific Institute, and Sierra Club, which together have several hundred thousand members and activists in California, we are writing to recommend that the California Water Commission reject the proposed draft agricultural water measurement regulation, which the Commission will review at its June 15, 2011 meeting. Our organizations were members of the Agricultural Stakeholder Committee (ASC) that was involved in the development of this regulation, and we have provided recommended amendments during the ASC process and before the Water Commission to ensure that the draft regulation complies with the requirements of SB 7x 7 of 2009, the Water Conservation Act of 2009 ("Act"). Unfortunately, as we noted in our May 17, 2011 letter (which is attached), and as discussed in more detail below, the revised draft regulation fails to comply with the Act, and it is both unlawful and bad public policy. We strongly urge the Commission to reject the current draft regulation, and adopt the following recommendations to ensure that the regulation conforms to the requirements of the Act.

As a general matter, SB 7x 7 requires certain large agricultural water suppliers to measure the volume of water delivered at the farm gate, cross-referencing and referring to a prior statutory requirement. Water Code § 10608.48(b) (citing Water Code § 531.10(a)). However, section 10608.48(b) only cross-references the requirement in section 531.10(a) to measure the volume of water deliveries at the farm gate, and explicitly does not reference the exemption for local cost-effectiveness that is provided in section 531.10(b) of the water code. As a result, the proposed exemption allowing measurement at the lateral, rather than the farm gate, because of cost considerations associated with requiring two measurement devices (one high flow, one low flow) is inconsistent with the statutory requirement. *See id.*¹

¹ The exemption allowing measurement at the turnout because of a lack of access to the farm gate is overbroad, particularly when the regulation does not require water districts to use their legal authorities to try to obtain access.

Similarly, Section 597.1 of the draft regulation would provide that CVP contractors “are deemed in compliance” with the requirements of SB 7x 7, and thus exempts such contractors from having to comply with the measurement and pricing requirements of Section 10608.48(b). However, all Agricultural Water Suppliers subject to SB 7X 7, including CVP contractors, must meet the measurement requirement of Section 10608.48, and the proposed exemption is unlawful.

SB 7X 7 specifically excludes certain CVP contractors from having to prepare and submit Agricultural Management Plans, permitting certain CVP contractors to instead submit the water conservation plan that has been accepted as adequate by the U.S. Bureau of Reclamation. *See* Water Code § 10828. A second statutory exemption allows certain CVP contractors to submit their water conservation plan in lieu of reporting, as part of the Agricultural Water Management Plan, the efficient water management practices that have been implemented. Water Code § 10608.48(f). However, while section 10608.48(f) explicitly exempts certain CVP contractors from the reporting requirements of section 10608.48(d) and (e), section 10608.48(f) does not exempt such CVP contractors from the measurement requirements of section 10608.48(b)(1).² It is a canon of statutory construction that the existence of specific exemptions negates the implied existence of a broader exemption. *See Wildlife Alive v. Chickering*, 18 Cal.3d 190, 195 (1976) (“Under the familiar rule of construction, *expressio unius est exclusio alterius*, where exceptions to a general rule are specified by statute, other exceptions are not to be implied or presumed.”). While the Legislature exempted CVP contractors from reporting requirements, it did not exempt them from the measurement and volumetric pricing requirements of section 10608.48(b).

Finally, several provisions of the proposed regulation fail to require measurement with sufficient accuracy, or introduce vague and undefined terms that undermine accurate measurement. On the pages that follow, we provide recommended amendments to the following provisions of the draft regulation:

1. Exemption for CVP Contractors (§ 597.1(i))
2. Exemptions from requirement to measure at the farm gate (§ 597.3(b))
3. Accuracy certification and standards (§ 597.3(a)(1), (2))
4. Field inspections (§ 597.4(a),(b))

While we recognize that the proposed regulation has changed over the past month, and we appreciate the Department’s hard work on this draft regulation, unfortunately most of the concerns we have repeatedly raised have not been adequately addressed. We strongly urge the Commission to adopt the recommendations identified below.

Both of these exemptions were discussed at length in our May 17, 2011 letter, which is attached and incorporated into these comments.

² In addition, the Legislature specifically exempted agricultural water suppliers that supply water to less than 25,000 irrigated acres from both the planning and measurement requirements, unless funding is provided. *See* Water Code § 10853. However, the statutory exemption for CVP contractors only applies to the planning and reporting requirements, *see* Water Code §§ 10608.48(f), 10828, and not from the requirement to implement measurement and other efficient water management practices. Because the legislature provided the broader exemption to certain agricultural water suppliers, and provided a narrower exemption to certain CVP contractors, SB 7X 7 cannot be read to apply a broader exemption for CVP contractors that includes an exemption from implementing the water measurement and volumetric pricing requirements of section 10608.48(b). *See Chickering*, 18 Cal.3d at 195.

RECOMMENDATION #1: Eliminate the unlawful exemption for CVP contractors (Exhibit 4)

Recommendation: Delete section 597.1(i) of the draft regulation.

RECOMMENDATION #2: Narrow the Exemptions That Allow Measurement Upstream of the Farm Gate (Exhibits 3a and 3b)

(i) Lack of Access Exemption (Exhibit 3a)

Recommendation: Revise subpart 597.3(b)(1)(A) to read as follows:

The agricultural water supplier does not have, and lacks the legal authority to obtain, legal access to the customer delivery points or farm-gates downstream of the point of measurement needed to install, measure, maintain, operate, and monitor a measurement device.

Recommendation: Revise subpage 597.3(b)(2)(A) to read as follows:

When applicable, to demonstrate lack of legal access at customer delivery points or farm-gates downstream of the point of measurement, the agricultural water supplier shall provide documentation self-certify to the Department from legal counsel to the water supplier that it lacks legal authority to obtain access to the farm gate and has sought and been denied access from its customers to measure water at those customer delivery points or farm-gates.

(ii) Single Measurement Device Exemption (Exhibit 3b)

Recommendation: Revise subpart 597.3(b)(1)(B) as follows:

The measurement options in §597.3(a) cannot be met, as approved by an engineer, by installing a single one or more commercially available measurement device(s) at each of the ~~downstream customer delivery points or~~ farm-gates because small differentials in water level or large fluctuations in flow rate or velocity occur during the delivery season at those delivery points or farm-gates. When a water measurement device becomes commercially available that can meet the measurement options in §597.3(a)(2) at the ~~customer delivery points or~~ farm-gates, an agricultural water supplier shall include in its Agricultural Water Management Plan a schedule, budget and finance plan to measure water at the individual customer delivery points in compliance with §597.3(a) of this Article prior to the adoption of the subsequent Agricultural Water Management Plan.

Recommendation: Revise subpart 597.3(b)(2)(B) as follows:

When applicable, the agricultural water supplier shall document ~~that~~ the specific field or flow condition(s) described in §597.3(b)(1)(B) that exist at customer delivery points or the farm-gates downstream of the point of measurement. The documentation, which shall be submitted to the Department each year that this provision is in effect, shall include the specific field or flow conditions, including but not limited to flow, head loss, canal stability, crop selection, on farm practices, and any other factors that preclude accurate measurement at the farm gate, and shall be attested to and approved by an engineer. The documentation shall also include a summary of the agricultural water supplier's efforts during the previous twelve months to obtain commercially available measurement device(s) that meet the requirements of section 597.3(a)(1).

RECOMMENDATION #3: Revise accuracy standards to 5% and 10% for existing and new measurement devices (Exhibit 2c)

Recommendation: Revise subpart 597.3(a)(1) as follows:

a) Measurement Options at the Delivery Point or Farm-gate of a Single Customer

An agricultural water supplier shall measure water delivered at the delivery point or farm-gate of a single customer using one of the following measurement options. The stated numerical accuracy for each measurement option is for the volume delivered. If a device measures a value other than volume, for example, flow rate, velocity or water elevation, the accuracy certification must incorporate the measurements or calculations required to convert the measured value to volume as described in §597.4(e).

- 1) An existing measurement device shall be certified to be accurate to within ~~±10~~^{±12}% by volume.

and,

- 2) A new or replacement measurement device shall be certified to be accurate to within:
 - A) ±5% by volume in the laboratory if using a laboratory certification;
 - B) ±10% by volume in the field if using a non-laboratory certification.

Recommendation: Revise subpart 597.3(b) as follows:

An agricultural water supplier may measure water delivered at a location upstream of the delivery points or farm-gates of multiple customers using one of the measurement options and accuracy standard described in §597.3(a) if the downstream customer delivery points or farm-gates meet either of the following conditions:

RECOMMENDATION #4: Eliminate “field inspection” as a certification method

Discussion: In prior oral comments to the Commission and Department, we have noted that there are no criteria that demonstrate that “field inspection” ensures the accurate measurement of water

that is delivered. Unfortunately, the current draft does not provide any standard criteria for field inspections, and the draft regulation does not adequately demonstrate that field inspections will ensure the accuracy of the measurement device. Indeed, there is no definition of what constitutes field inspection. Because it does not require testing the accuracy of any of the measurement devices, field inspection appears inadequate to demonstrate and ensure sufficient accuracy of reported water delivery data. Until such time that the regulation includes standards and criteria to ensure that field inspection can demonstrate that measurement devices achieve the accuracy standard, field inspection should be deleted from the draft regulation.

Recommendation: Revise Section 597.4 to delete references to field inspection, including deleting subparts 597.4(a)(1)(B), 597.4(a)(2)(B)(ii), and 597.4(b)(3).

CONCLUSION

We strongly urge the Commission to incorporate these changes to the draft agricultural water measurement regulations, to ensure that the regulations comply with the statutory requirements and advance sound public policy.

Thank you for consideration of our views. We look forward to discussing these issues with the Commission at its meeting on June 15.

Sincerely,

Doug Obegi
Natural Resources Defense Council

Jim Metropulos
Sierra Club California

Dr. Juliet Christian-Smith
Pacific Institute



May 17, 2011

Mr. Anthony Saracino
Chair, California Water Commission
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With respect to agricultural water efficiency, the Act requires water suppliers to, “[m]easure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10,” and to implement volumetric pricing. Water Code § 10608.48(b). Additional practices to improve efficiency are required to be implemented if they are technically feasible and locally cost effective. *Id.* § 10608.48(c). The Act incorporates and strengthens agricultural water measurement requirements of AB 1404 of 2007 (Asm. Laird).

We appreciate that the Department of Water Resources eliminated the exemption for CVP contractors in its May 3, 2011 draft regulations, following our repeated comments that this proposed exemption clearly violated the requirements of the Act. However, the draft agricultural water measurement regulation still fails to comply with the statutory requirements of the Act in several key respects.

- The draft regulation fails to require measurement of water deliveries to individual customers at the farm gate, as the Act intends, and instead allow measurement of water deliveries to multiple farmers.
- The draft regulation fail to require accurate measurement of the volume of water delivered to customers, allowing instead the certification of the accuracy of flow rate or velocity, which alone do not constitute volume.

In addition, the draft regulation includes several provisions that appear to weaken the measurement requirements, despite the Act's clear intent. Most importantly, the draft regulation allows for a poorly defined process of "field analysis" of existing water measurement devices, instead of requiring testing of a representative sample of measurement devices to ensure their accuracy.¹ Another provision of the draft regulation² imposes no deadline to ever replace, repair, or upgrade measurement devices that are determined to be inaccurate. Both of these provisions fail to ensure the accuracy of the reporting data, and both provisions should be either strengthened or removed from the regulation.

On the pages that follow, we have provided more detail on these key issues, and we have recommended language to ensure the final regulations are consistent with the statutory requirements of the Act.

Thank you for consideration of our views. Please feel free to contact us at your convenience if you have any questions or concerns.

Sincerely,

Doug Obegi
Natural Resources Defense Council

Jim Metropulos
Sierra Club California

Dr. Juliet Christian-Smith
Pacific Institute

¹ Section 597.4(a) calls for testing a statistically representative sample of previously installed measurement devices, and then 597.4(b) inexplicably recommends that testing be capped at 100 individual devices regardless of the number of devices that would actually constitute a statistically representative sample. Thus the regulation does not require testing a statistically representative sample of the measurement devices, as it should.

² Sec. 597.4(d)(2) and (3).

Recommended Changes to the Draft Agricultural Water Measurement Regulation to Comply with the Water Conservation Act of 2009

(1) The Draft Regulation Fails to Require Measurement of Water Deliveries to Customers at the Farm Gate

Section 597.3(b) of the draft regulation authorizes agricultural water suppliers to avoid the requirement to measure water deliveries at the farm gate, and instead allows measurement upstream of the customer delivery point. This exemption from measurement of water delivery at the farm gate is allowed if: (i) the supplier does not currently have access to the customer delivery point; or (ii) if the accuracy standard cannot be met with a single measurement device, “such as occurs for rice cultivation.” As a result, DWR’s economic analysis expects that half of all acreage subject to the regulation in the Sacramento Valley will not be measured at the farm gate. See DWR, Cost Analysis for Proposed Agricultural Water Measurement Regulation in Support of Economic and Fiscal Impact Statement, April 22, 2011, at p. 10.

California is the number two rice producing state in the nation, and in 2010, over 550,000 acres of rice were harvested (nearly all from six contiguous counties in the Sacramento Valley), an amount of harvested acreage that was second only to hay among all crops harvested statewide. With an average water duty of five acre-feet per acre, rice production draws nearly 3 million acre-feet of water per year, a staggering amount roughly equal to the customer demand of five cities the size of Los Angeles. Nothing in the language of the statute suggests any legislative intention that such a significant sector of agricultural water use – indeed, such a significant portion of water use statewide – should be broadly exempt from the state’s farm-gate measurement requirement. Neither of these exemptions is consistent with the requirements of the Act, and both exemptions should be revised so that narrow exemptions are provided for the small number of farmers that truly cannot comply with the critical measurement requirement.

(i) Lack of Access Exemption

As currently drafted, section 597.3(b)(A)(i) of the draft regulation allows water suppliers to avoid measuring water deliveries to customers at the farm gate if the water supplier currently lacks access to the customer delivery point (farm gate).³ Some water suppliers may have never needed legal access to the farm gate, but are authorized by law to acquire such access. Indeed, the current draft language does not even require a water supplier to ask to obtain access, let alone use its legal authorities to do so. This exception is overbroad and is inconsistent with the intent and requirements of the Act, and the language should be revised to provide a more narrowly drawn exception that is consistent with the intent of the law.

³ The term “customer delivery point” in the draft regulations is unnecessary and introduces additional confusion. Instead, the draft regulations should cross-reference the definition of “farm gate” in section 531(f) of the Water Code (““Farm-gate” means the point at which water is delivered from the agricultural water supplier’s distribution system to each of its customers.”).

RECOMMENDATION: Revise subpart 597.3(b)(A)(i) to read as follows:

(A)(i) The agricultural water supplier does not have, and lacks the legal authority to obtain, sufficient access to allow for the installation, operation, and maintenance of measurement devices at customer delivery points.

(ii) Single Measurement Device Exemption

There is no basis in law for the “single measurement device” exemption in section 597.3(b)(A)(ii) of the draft regulation. This exemption appears to be an attempt to incorporate a “locally cost effective” exemption into the regulation, notwithstanding the statutory requirements to the contrary. As noted earlier, the Act incorporates and builds on the requirements of section 531.10(a) of the Water Code, which was enacted as part of AB 1404 of 2007 (Laird). Section 531.10(a) requires agricultural water suppliers to report farm-gate water delivery data, and section 531.10(b) exempts suppliers from having to comply with this and other requirements of AB 1404 if the programs or practices are not locally cost effective.

However, two provisions of SB 7x 7 conclusively demonstrate that a “locally cost effective” exemption does not apply to the measurement requirement: first, the Act includes explicit cost-effectiveness exemptions for other efficiency practices, but not with respect to water measurement and volumetric pricing requirements; and second, the 2009 legislation did not reference or incorporate subdivision (b) of section 531.10 (the locally cost effective exemption of AB 1404), instead only referencing subdivision (a) of section 510.10. *Id.* § 10608.48(c).

While we recognize that installation of a second measurement device if needed for accurate measurement would increase costs of compliance, the Legislature has determined that local cost effectiveness is not a valid exemption from the requirement to measure the volume of water delivered to customers at the farm gate. Limiting this language to one measurement device is an unreasonable interpretation of and contrary to the language of the statute.

Additionally, any exemption based upon an unavailability of equipment to accomplish the measurement task should require periodic recertification, to account for improvements in measurement technology in future years.

RECOMMENDATION: Revise section 597.3(b)(A)(2) to read as follows:

The agricultural water supplier has determined that the applicable accuracy standard of 597.3(a) cannot be met with commercially available measurement devices, where the agricultural water supplier provides documentation of the flow rates, elevations, and operating conditions that make it impossible to measure volume at each customer turnout for which the measurement exemption is claimed, and these data and the finding have been reviewed, signed and stamped by a registered Professional Engineer. An agricultural water supplier that utilizes the provisions of this section must demonstrate compliance with this section every three years, to account for changes in technology or cultural practices that may enable compliance with section 597.3(a).

(2) The draft regulation fails to require the measurement of volume with sufficient accuracy

The Act requires the water supplier to “[m]easure the volume of water delivered to customers with sufficient accuracy to comply with section 531.10(a)” and implement volumetric pricing. Water Code § 10608.48(b) (emphasis added). However, the current draft regulations fail to require accurate measurement of the volume of water deliveries, because it allows for the certification of the accuracy of either flow rate or flow velocity measurements, instead of requiring certification of the accuracy of the volume of water deliveries to the customer.

Sections 597.3(a) and (b) of the draft regulation provide numeric accuracy standards, but these sections only require the measurement be certified to be accurate “by flow rate, velocity or volume.” Similarly, section 597.2(a)(1) defines accuracy to mean the measured “flow rate, velocity or volume relative to the actual flow rate, velocity or volume.”

However, no provision of the draft regulation requires the *measurement of the volume of water* deliveries be accurate. Neither flow rate nor flow velocity constitute volume without the addition of additional variables, which themselves are subject to measurement error. Although water suppliers are required to document the procedures used to convert measured flow rate or flow velocity into volume, *see* draft regulation § 597.4(d)(4), no criteria are established for the level of accuracy of the computed volume resulting from such procedures. It should be noted that the Bureau of reclamations conservation criteria for CVP contractors is stated as an accuracy standard for volume. Thus, the current draft of the DWR regulation is substantially weaker than the standard applicable to most federal irrigation contractors today.

The statutory language plainly requires sufficiently accurate measurement of the volume of water deliveries, which is not interchangeable with velocity or flow rate. The accuracy band applied to each of these terms will not be identical, because the measurement of either velocity or flow rate alone is not sufficient to provide a measurement of volume, but rather requires additional measurements, such as cross section (in the case of velocity) and time (in the case of flow rate).

RECOMMENDATION: Revise Section 597.2(a)(1) to delete the words “flow rate” and “velocity” from the definition of “accuracy”, and revise Sections 597.3(a) and (b) to delete the words “flow rate” and “velocity” from the range of options for agricultural water measurement.